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10/593,524	07/29/2008	**Xin Yao**	4202-03000	2772

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EXAMINER	
ZONG, RUOLEI	

ART UNIT	PAPER NUMBER
2441	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/593,524	YAO, XIN	
	Examiner	Art Unit	
	RUOLEI ZONG	2441	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 March 2010*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,4,5,8,11,13,14,21-24 and 28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,4,5,8,11,13,14,21-24 and 28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This office action is responsive to the Appeal Brief filed on 03/15/2010. Claims 1, 4, 5, 8, 11, 13, 14, 21-24 and 28 are pending; claims 1, 4, 5, 8, 11, 13, 14, 21-24 and 28 are rejected.

1. In view of the "APPEAL BRIEF" filed on 03/15/2010, PROSECUTION IS HEREBY REOPENED. New grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

/Wing F. Chan/

Supervisory Patent Examiner, Art Unit 2441.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 11, 22-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Gbadegesin (US Patent 6,754,709 B1).

As to claim 1, **Gbadegesin** teaches a method, comprising:

receiving a message by a signaling proxy (SP), wherein the message has a source address and a destination address (*the gNAT (e.g. signaling proxy (SP)) detects the message from C1 address (e.g. source address) to S1 (e.g. destination address)*, **Gbadegesin**, **Col. 11, Line 43-61**);

processing the message if the destination address of the message is different than a SP address and an address for which the message is intended (*The proxy may include a translation of both the source and destination addresses such that the messages are actually forwarded by the proxy to server S2 (e.g. intended address) with an indication that the source was C2*, **Gbadegesin**, **Col. 11, Line 43-61; Gbadegesin, Col. 11, Line 12-26.** *Note the proxy may forward the request to a local server in* ***Gbadegesin, Col. 11, Line 12-26***); and

sending the message (**Gbadegesin**, **Col. 11, Line 43-61; Gbadegesin, Col. 11, Line 12-26.** *Note the proxy may forward the request to a local server in* ***Gbadegesin, Col. 11, Line 12-26***).

As to claim 11, **Gbadegesin** teaches an apparatus, comprising:

a receiving unit (*network interface*, **Gbadegesin, Fig. 1, 53**) configured to receiving a message, wherein the message has a source address and a destination address (*the gNAT detects the message from C1 address (e.g. source address) to S1 (e.g. destination address)*, **Gbadegesin**, **Col. 11, Line 43-61**);

a processing unit (*processing unit*, **Gbadegesin, Fig. 1, 21**) configured to process the message if the destination address of the message is different than a SP address and an address for which the message is intended (*The proxy may include a translation of both the source and destination addresses such that the messages are actually forwarded by the proxy to server S2 (e.g. intended address) with an indication that the source was C2*, **Gbadegesin**, **Col. 11, Line 43-61; Gbadegesin, Col. 11, Line 12-26.** *Note the proxy may forward the request to a local server in* ***Gbadegesin, Col. 11, Line 12-26***); and

a sending unit (*network interface*, **Gbadegesin, Fig. 1, 53**) configured to send the message (**Gbadegesin**, **Col. 11, Line 43-61; Gbadegesin, Col. 11, Line 12-26.** *Note the proxy may forward the request to a local server in* ***Gbadegesin, Col. 11, Line 12-26***).

As to claim 22, **Gbadegesin** teaches the method according to claim 1, wherein the address for which the message is intended is an address of a terminal or an address of a server (*The proxy may include a translation of both the source and destination addresses such that the messages are actually forwarded by the proxy to server S2 (e.g. intended address) with an indication that the source was C2*, **Gbadegesin**, **Col. 11, Line 43-61; Gbadegesin, Col. 11, Line 12-26.** *Note the proxy may forward the request to a local server in* ***Gbadegesin, Col. 11, Line 12-26***).

As to claim 23, **Gbadegesin** teaches the apparatus according to claim 11, wherein the address for which the message is intended is an address of a terminal or an address of a server (*The proxy may include a translation of both the source and destination addresses such that the messages are actually forwarded by the proxy to server S2 (e.g. intended address) with an indication that the source was C2*, **Gbadegesin**, **Col. 11, Line 43-61; Gbadegesin, Col. 11, Line 12-26.** *Note the proxy may forward the request to a local server in* ***Gbadegesin, Col. 11, Line 12-26***).

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claim 24 is rejected under 35 U.S.C. 102(e) as being anticipated by Akman (US Patent 7,146,410, B1).

As to claim 24, **Akman** teaches a system, comprising:

a signaling proxy (SP) (*MEGACO NAT*, **Akman, Fig. 1B, 170**) located between a terminal (*MG*, **Akman, Fig. 1B, 140**) and a server (*MGC*, **Akman, Fig. 1B, 110.** *Note the route of the messages traveling is: terminal TO Firewall/Router 160 (e.g. router) TO MEGACO NAT 170 (e.g. SP) TO Firewall/Router 160 TO MGC (e.g. server) in* ***Akman, Col 4, Line 42-60.*** *Therefore Akman discloses a SP located between a terminal and a server*); and

a router (*FIREWALL/ROUTER*, **Akman, Fig. 1B, 160**) located between the terminal and the SP,

wherein the SP is configured to receive a message and process the message if at least one of a VPN ID, a VLAN ID, a MPLS ID, an IP protocol type, a source address, or a source port of the message meets a strategy of the SP (*The firewall/NAT 160 then inspects the Service Change message and changes the IP address of the MG from [10.12.2.2] to [175.17.4.1] 220 (e.g. processing the message if source address meets a strategy). [175.17.4.1] is the IP address of the firewall/NAT 160 according to the private IP network 120. The change is entered in the NAT table maintained by the firewall/NAT 160. Next, the firewall/NAT 160 sends the MEGACO Service Change message 230 to the MGC 110 using the substitute IP address*, **Akman, Col. 4, Line 25-53**); and

wherein the router is configured to forward the message to the SP according to a forwarding strategy (*firewall/NAT router 160 offloads all MEGACO messages entering and leaving IP network 120 to MEGACO NAT server 170 (e.g. forwarding strategy) for inspection and translation of IP addresses within MEGACO messages,* **Akman, Col. 4, Line 1-13**).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 4, 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gbadegesin in view of Chen et al. (Hereinafter Chen, US Patent Application Publication 2002/0021688 A1).

As to claim 4, **Gbadegesin** substantially teaches a method as set forth in claim 1 above and replacing the destination address of the message with the address for which the message is intended ((*The proxy may include a translation of both the source and destination addresses such that the messages are actually forwarded by the proxy to server S2 (e.g. intended address) with an indication that the source was C2,*

Gbadegesin, Col. 11, Line 43-61; Gbadegesin, Col. 11, Line 12-26. *Note the proxy may forward the request to a local server in* ***Gbadegesin, Col. 11, Line 12-26***)); and

replacing the source address of the message with an address ((*The proxy may include a translation of both the source and destination addresses such that the messages are actually forwarded by the proxy to server S2 (e.g. intended address) with an indication that the source was C2*, **Gbadegesin, Col. 11, Line 43-61**).

Gbadegesin differs from the instant claim in not disclosing substituting the source address with the address of the SP.

However **Chen** teaches substituting the source address with the address of a SP (changing the packet header so that the source address is the home agent address (e.g. an address of an SP), **Chen, Para. 0015; Chen, Para. 0032-0033**).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use source address replacement of **Chen** on the method of **Gbadegesin** in order to inspect and translate control protocol messages exchanged between nodes on separate IP networks.

As to claim 13, **Gbadegesin** substantially teaches an apparatus as set forth in claim 11 above and to replace the destination address of the message with the address for which the message is intended ((*The proxy may include a translation of both the source and destination addresses such that the messages are actually forwarded by the proxy to server S2 (e.g. intended address) with an indication that the source was C2*, **Gbadegesin, Col. 11, Line 43-61; Gbadegesin, Col. 11, Line 12-26.** *Note the proxy*

may forward the request to a local server in ***Gbadegesin, Col. 11, Line 12-26***)), and replace the source address of the message with an address ((*The proxy may include a translation of both the source and destination addresses such that the messages are actually forwarded by the proxy to server S2 (e.g. intended address) with an indication that the source was C2*, **Gbadegesin, Col. 11, Line 43-61**).

Gbadegesin differs from the instant claim in not disclosing to substitute the source address with the address of the SP.

However **Chen** teaches substituting the source address with the address of a SP (changing the packet header so that the source address is the home agent address (e.g. an address of an SP), **Chen, Para. 0015; Chen, Para. 0032-0033**).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use source address replacement of **Chen** on the apparatus of **Gbadegesin** in order to inspect and translate control protocol messages exchanged between nodes on separate IP networks.

8. Claims 5, 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gbadegesin modified by Chen as applied to claim 4, 13 above, and further in view of Akman.

As to claim 5, **Gbadegesin-Chen** substantially teaches a method as set forth in claim 4 above and receiving a response from an entity for which the message is intended; and sending the response (*the intelligent transparent proxy may use the NAT*

API 108 (see FIG. 9) to command a dynamic redirect in the gNAT 106 so that when messages are received from server S.sub.2 they may be properly routed to the correct client (C1), **Gbadegesin, Col. 11, Line 62 – Col. 12, Line 17**).

Gbadegesin-Chen does not explicitly disclose replacing a destination address of the response with the source address of the message; replacing a source address of the response with the destination address of the message.

However **Akman** teaches replacing a destination address of a response with a source address of a message; replacing a source address of a response with a destination address of a message (*The MGC 110 responds with a Service Change Reply message 240 containing its IP address. The firewall/NAT 160 relays the Service Change Reply message 250 to MG [10.12.2.2] 140 completing the registration*, **Akman, Col. 4, Line 32-41; Akman, Fig. 2A**).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use address replacement of **Akman** on the method of **Gbadegesin-Chen** in order to inspect and translate control protocol messages exchanged between nodes on separate IP networks.

As to claim 14, **Gbadegesin-Chen** substantially teaches an apparatus as set forth in claim 13 above and to receive a response from an entity for which the message is intended (*the intelligent transparent proxy may use the NAT API 108 (see FIG. 9) to command a dynamic redirect in the gNAT 106 so that when messages are received*

from server S.sub.2 they may be properly routed to the correct client (C1), **Gbadegesin, Col. 11, Line 62 – Col. 12, Line 17**).

Gbadegesin-Chen does not explicitly disclose to replace a destination address of the response with the source address of the message and replace a source address of the response with the destination address of the message.

However **Akman** teaches to replace a destination address of a response with a source address of a message and replace a source address of a response with a destination address of a message (*The MGC 110 responds with a Service Change Reply message 240 containing its IP address. The firewall/NAT 160 relays the Service Change Reply message 250 to MG [10.12.2.2] 140 completing the registration*, **Akman, Col. 4, Line 32-41; Akman, Fig. 2A**).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use address replacement of **Akman** on the apparatus of **Gbadegesin-Chen** in order to inspect and translate control protocol messages exchanged between nodes on separate IP networks.

9. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gbadegesin in view of Akman.

As to claim 8, **Gbadegesin** substantially teaches a method as set forth in claim 1 above.

Gbadegesin does not explicitly disclose before the SP receives the message, forwarding the message to the SP according to a forwarding strategy by a network device.

However **Akman** teaches before a SP receives a message, forwarding the message to the SP according to a forwarding strategy by a network device (*firewall/NAT router 160 offloads all MEGACO messages entering and leaving IP network 120 to MEGACO NAT server 170 (e.g. forwarding strategy) for inspection and translation of IP addresses within MEGACO messages*, **Akman, Col. 4, Line 1-13**).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use address replacement of **Akman** on the method of **Gbadegesin** in order to inspect and translate control protocol messages exchanged between nodes on separate IP networks.

10. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gbadegesin modified by Akman as applied to claim 8 above, and further in view of Oguchi (US Patent 7,574,522 B2).

As to claim 21, **Gbadegesin-Akman** substantially teaches a method as set forth in claim 8.

Gbadegesin-Akman does not explicitly disclose the forwarding strategy comprises forwarding the message to the SP according to the destination address of the message.

However **Oguchi** teaches a forwarding strategy comprises forwarding a message to a SP according to the destination address of the message (*a default route is set so that each of the routers within the private address domain forwards all the packets of which destination addresses are other than within the Intranet to the NAT router*, **Oguchi, Col. 1, Line 54-60**).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use forwarding strategy of **Oguchi** on the method of **Gbadegesin-Akman** in order to keep a confidentiality of the local intranet and to block an interference from outside.

11. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Akman in view of Oguchi (US Patent 7,574,522 B2).

As to claim 28, **Akman** substantially teaches a system as set forth in claim 24.

Akman does not explicitly disclose the forwarding strategy comprises forwarding the message to the SP according to the destination address of the message.

However **Oguchi** teaches a forwarding strategy comprises forwarding a message to a SP according to the destination address of the message (*a default route is set so that each of the routers within the private address domain forwards all the packets of which destination addresses are other than within the Intranet to the NAT router*, **Oguchi, Col. 1, Line 54-60**).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use forwarding strategy of **Oguchi** on the system of **Akman** in order to keep a confidentiality of the local intranet and to block an interference from outside.

Response to Arguments

12. Applicant's arguments regarding claim 24 has been fully considered but they are not persuasive.

Regarding applicant's remark "Akman's second embodiment fails to teach the above limitations because the SP (MEGACO NAT) in Akman's second embodiment is not located between the terminal (MG) and the server (MGC)", the examiner respectfully disagrees. Akman disclose the route of messages traveling is: terminal TO Firewall/Router 160 (e.g. router) TO MEGACO NAT 170 (e.g. SP) TO Firewall/Router 160 TO MGC (e.g. server) in Akman, Col 4, Line 42-60, therefore the message travel from terminal through the SP or MEGACO NAT 170 to the server or MGC. Therefore, Akman's disclosure still reads on the claimed limitation.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RUOLEI ZONG whose telephone number is (571)270-7522. The examiner can normally be reached on 8:30 AM - 6:00 PM, 5-4-9.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, WING F. CHAN can be reached on (571)272-7493. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/RUOLEI ZONG/
Examiner, Art Unit 2441

/Wing F. Chan/
Supervisory Patent Examiner,
Art Unit 2441

4/29/2010